In the claims:

1. (CURRENTLY AMENDED) A method of analyzing a bundle of banknotes, which method comprises the steps of providing a bundle of banknotes, which bundle comprises at least one surface defined by the edges of banknotes, subjecting the bundle to one or more destructive operations, illuminating the surface of said bundle, providing a two-dimensional image of the bundle by making use of an optical sensor, and providing an output signal that represents the result of the analysis, wherein according to said one or more destructive operations, one or more sides or edges of the bundle of banknotes is subjected to a mechanical operation, such that one or more clean surfaces are obtained, which clean surfaces are used in analyzing the bundle of banknotes.

2. (Previously Presented) The method according to claim 1, wherein the image is reduced in the x-direction, which x-direction is defined as the width of the bundle of banknotes.

3. (Previously Presented) The method according to claim 1 wherein the step of providing the two-dimensional image of the bundle and obtaining an output signal comprises the step of carrying out an image processing operation, using a pixel matrix.

4. (Previously Presented) The method according to claim 3, wherein the step of carrying out an image processing operation comprises the provision of a pixel matrix in which the number of pixels in the y- direction is larger than the number of pixels in the x-direction.

5. (Previously Presented) The method according to claim 4, wherein the number of pixels in the y-direction is at least 3 times larger than the number of pixels in the x-direction.

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6. (Previously Presented) The method according to claim 4, wherein the number of pixels in the y-direction is preferably at least 5 times larger than the number of pixels in the x-direction.

7. (Previously Presented) The method according claim 3 wherein the step of carrying out the image processing operation comprises the steps of awarding a value corresponding to the optical density to a pixel, determining a threshold value of the optical density, awarding a priority to a pixel having an optical density value higher than the threshold value while determining a second derivative of the density profile of the surrounding pixels, determining an average value of the density for a row of pixels in the y-direction, which row comprises one or more pixels having a priority, determining the spread and the standard deviation of the average value thus determined, and providing an output signal which is the summation of the number of average values higher than the threshold value.

8. (CANCELED)

9. (CANCELED)

10. (Previously Presented) The method according to claim 1 wherein the analysis comprises the determination of one or more of the following parameters: the authenticity, the number of banknotes, the value and the fitness of the bundle of banknotes.

11. (Previously Presented) The method according to claim 1 wherein said irradiation with UV light is carried out on one side of a bundle of banknotes.

12. (Previously Presented) The method according to claim 1 wherein said irradiation with infrared light is carried out on one side of a bundle of banknotes.

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13. (Previously Presented) The method according to claim 10 wherein an image of one side of the bundle of banknotes is obtained by making use of a high-resolution camera as an optical sensor, which image is processed, using a suitable data processing unit, for the purpose of determining the authenticity of the bundle.

14. (Previously Presented) The method according claim 10 wherein an image of one side of the bundle of banknotes is obtained by making use of a high-resolution camera as an optical sensor, which image is processed, using a suitable data processing unit, for the purpose of determining the number of banknotes in a bundle.

15. (Previously Presented) The method according to claim 10 wherein said determination of the number of banknotes in a bundle of banknotes is carried out by irradiating one side of the bundle with far infrared light at a number of angles of incidence and carrying out a time measurement on the reflected radiation.

16. (Previously Presented) The method according to claim 10 wherein an image of one side of the bundle of banknotes is obtained by making use of a high-resolution camera as an optical sensor, which image is processed, using a suitable data processing unit, for the purpose of determining the origin and/or the value of the bundle of banknotes.

17. (Previously Presented) The method according to claim 10, wherein the fitness of a bundle of banknotes is determined by measuring the compressibility of a bundle of banknotes.

18. (Previously Presented) The method according to claim 10, wherein the fitness of a bundle of banknotes is determined by measuring the acoustic resistance of a bundle of banknotes.

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19-25. (CANCELED)

26. (Previously Presented) The method according to claim 1, wherein the providing of the two-dimensional image is carried out in such a manner that the image is enlarged in the y-direction, which y-direction is defined as the height of the bundle of banknotes.

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